REMARKS

In response to the Office Action mailed December 8, 2009, Applicants respectfully request reconsideration. Claims 1, 3-8, 10-20, 23-25 and 28 were previously pending in this application. By this amendment, claims 1, 17, 19 and 23 have been amended. No claims have been added or canceled. As a result, claims 1, 3-8, 10-20, 23-25 and 28 are pending for examination with claims 1, 16, 17, 18, 19, 20, 23 and 25 being independent claims. No new matter has been added.

Telephone Conference with the Examiner

Applicants' representative appreciates the courtesies extended by Examiner Wu in granting and conducting a telephone interview on March 1, 2010. Applicants were represented at the interview by Joseph Teja, Jr. During the telephone interview, Applicants' representative and the Examiner discussed the proposed claim amendments and arguments in response to the rejections under 35 U.S.C. §101. The Examiner indicated that the rejections under 35 U.S.C. §101 of claims directed to computer-readable storage media would be withdrawn. The Examiner also agreed that the proposed amendments, as implemented herein, would overcome the remaining rejections under 35 U.S.C. §101.

Also discussed during the interview were the rejections under 35 U.S.C. §103, the teachings of Chow (USPN 6,771,966), and the subject matter of claim 1. The Examiner acknowledged the distinction between the teachings of Chow in connection with the selection of links between existing network nodes, and the subject matter of the claims which relate generally to placement locations of new network nodes being added to a network. The Examiner indicated he would reconsider the rejection in view of the distinction pointed out by Applicants' representative.

The remarks and amendments contained herein may serve as a further summary of the interview.

Rejections Under 35 U.S.C. §101

The Office Action rejected claims 1, 3-8, 10-20, 23-25 and 28 under 35 U.S.C. §101, as purportedly not falling within one of the four statutory categories of invention.

Independent Claims 1, 17, 19 and 23

The Office Action asserts that claim 1 is not a statutory process because it is not tied to another statutory category and does not transform underlying subject matter to a different state or thing. Claim 1 has been amended to recite "employing a processor executing computer-executable instructions to perform acts of..." This amendment clearly ties the method of claim 1 to a particular machine. Claim 1 is therefore statutory under 35 U.S.C. §101 and the rejection should be withdrawn.

Claims 17, 19 and 23 each recite "employing a processor executing computer-executable instructions to perform acts of..." and are also statutory under 35 U.S.C. §101.

Independent Claims 16, 18, 20 and 25

The Office Action asserts that claim 16 is directed to non-statutory subject matter because it is the computer-readable storage medium form of claim 1. Applicants respectfully point out that claim 16 is independent and does not depend from claim 1. Claim 16 is not a process claim and therefore the machine-or-transformation test should not be apply. Rather, claim 16 is directed to a computer-readable storage medium, which is a manufacture, and is therefore statutory under 35 U.S.C. §101.

Each of claims 18, 20 and 25 are directed to a computer-readable storage medium and is also statutory under 35 U.S.C. §101.

Claims 3-8, 10-15, 24 and 28 depend from one of the above independent claims and the rejection of these claims under 35 U.S.C. §101 should be withdrawn based at least on their dependency.

Rejections Under 35 U.S.C. §103

I. Claims 1 and 16 are rejected under 35 U.S.C. 103(a) based on Chow, U.S. Patent No. 6,771,966 (hereinafter Chow) in view of Ayyagari et al., U.S. Patent Publication No. 2002/0101822 (hereinafter Ayyagari).

Independent Claim 1

Claim 1 is directed to a method for determining placement locations of Internet Transit Access Points (ITAPs) in a network. Claim 1 recites, *inter alia*:

> selecting, as a new ITAP for the network, the test ITAP from the set of potential ITAPs having a maximum computed value of the node demands satisfied when opened together with ITAPs in the set of currently open ITAPs;

Claim 1 clearly distinguishes over the cited references. Chow describes a "process to provide the best set of radio links or radio topology once the nodes and radio sites have been identified" (col. 9, lines 48-50). Specifically, Chow describes an iterative process for selecting and eliminating links that is repeated "until the engineer is satisfied with the layout" (col. 9, lines 66-67). By contrast, claim 1 recites "selecting, as a new ***ITAP*** for the network, the test ***ITAP***." Internet Transit Access Points (ITAPs) are not equivalent to the links described by Chow. During the interview, the Examiner seemed to appreciate the differences between the iterative process of selecting ITAP locations recited in claim 1 and the iterative process for selecting and eliminating links described in Chow. Ayyagari, which is cited to show contention-based MAC, does not cure the deficiencies of Chow.

In view of the foregoing, Applicants respectfully submit that claim 1 patentably distinguishes over the prior art of record, so that the rejection of claim 1 under 35 U.S.C. §103 should be withdrawn.

Claims 3-8 depend from claim 1 and are patentable based at least upon their dependency. Withdrawal of the rejection of claims 3-8 is respectfully requested.

Independent Claim 16

Claim 16, as amended, is directed to a method for determining placement locations of Internet Transit Access Points (ITAPs) in a network. Claim 16 recites, *inter alia*:

> selecting an ITAP, from the set of potential ITAPs to be opened, to be added to a set of currently open ITAPs;
> computing node demands satisfied if the selected ITAP is added to the set of currently open ITAPs;

when the computing indicates the selected ITAP increases the node demands satisfied when opened together with ITAPs in the set of currently open ITAPs, ***adding the selected ITAP to the set of currently opened ITAPs***;

Claim 16 clearly distinguishes over the cited references. It should be clear from the discussion of the references in connection with claim 1 that the prior art of record fails to disclose or suggest "***adding the selected ITAP to the set of currently opened ITAPs***" as recited in claim 16. Chow certainly does not describe adding the selected ITAP "when the computing indicates the selected ITAP increases the node demands satisfied when opened together with ITAPs in the set of currently open ITAPs."

Accordingly, claim 16 patentably distinguishes over the prior art of record, so that the rejection of claim 16 under 35 U.S.C. §103 should be withdrawn.

Claims 10-15 depend from claim 16 and are patentable based at least upon their dependency. Withdrawal of the rejection of claims 10-15 is respectfully requested.

II. Claims 17-20 and 28 are rejected under 35 U.S.C. 103(a) based on Chow, in view of Ayyagari, in further view of Layson et al., U.S. Patent No. 6,771,966 (hereinafter Layson).

Independent Claims 17-20

Independent claims 17-20 each recite a step of adding a node to the set of current open nodes. More specifically, claim 17 recites "adding the selected ***access point*** to the set of currently opened access points," claim 18 recites "adding the selected new first ***node*** to the set of currently opened first nodes," claim 19 recites "adding the selected new ***ITAP*** to the set of currently opened ITAPs, where ITAP stands for Internet Transit Access Point," and claim 20 recites "adding the selected ***Internet access node*** to the set of currently opened Internet access nodes."

As discussed above, Chow describes an iterative process for selecting and eliminating links that is repeated until the engineer is satisfied with the layout. During the interview, the Examiner seemed to appreciate the distinction between adding a node to a set of open nodes as recited in claims 17-20 and Chow's process of selecting and eliminating links. Ayyagari and Layson, are

cited to show contention-based MAC and iterating through time intervals, respectively, and do not cure the deficiencies of Chow.

In view of the foregoing, Applicants respectfully submit that claims 17-20 patentably distinguish over the prior art of record, so that the rejection of claims 17-20 under 35 U.S.C. §103 should be withdrawn.

Claim 28 depends from claim 20 and is patentable based at least upon its dependency. Withdrawal of the rejection of claim 28 is respectfully requested.

II. Claims 23-25 are rejected under 35 U.S.C. 103(a) based on Chow. The rejection is respectfully traversed.

Independent Claim 23

Claims 23 is directed to a method for reducing potential placement locations of Internet Transit Access Points (ITAPs). Claim 23 recites, *inter alia*, "determining whether a first equivalence class is covered by a second equivalence class."

The Office Action cites FIG. 7 of Chow as satisfying this limitation of claim 23. FIG. 7 is a graphical representation of possible links between radio sites (col. 8, ll. 16-17). There is no discussion anywhere in Chow of equivalence classes let alone "determining whether a first equivalence class is covered by a second equivalence class" as recited in claim 1.

Claim 23 also recites "eliminating the first equivalence class from consideration as a potential placement location for the ITAP if the first equivalence class is covered by the second equivalence class." The Office Action admits that Chow does not explicitly disclose this limitation but seems to assert that other teachings of Chow would have rendered the modification of Chow obvious. Although Applicants do not fully understand the rationale put forth in the Office Action, Applicants again restate that Chow describes an iterative process for selecting and elimination links, not ITAPs. The passage of Chow cited in the Office Action in connection with this limitation of claim 23 (col. 9, ll. 64-66) describes characterizing the performance of the network once links have

been selected. There is no teaching anywhere in Chow to eliminate an "equivalence class from consideration as a potential placement location for the ITAP" as recited in claim 23.

Accordingly, claims 23 patentably distinguishes over the prior art of record, so that the rejection of claim 23 under 35 U.S.C. §103 should be withdrawn.

Claim 24 depends from claim 23 and is patentable based at least upon its dependency. Withdrawal of the rejection of claim 24 is respectfully requested.

Independent Claim 25

Claim 25 recites, *inter alia*:

> determining whether a first equivalence class is covered by a second equivalence class; and
>
> eliminating the first equivalence class from consideration as a potential placement location for the ITAP if the first equivalence class is covered by the second equivalence class.

The Office Action contends that Chow satisfies these limitations of claim 25 using the same rationale as the rejection of claim 23. It should be clear from the discussion of the references in connection with claim 23 that the prior art of record fails to satisfy at least the highlighted limitations of claim 25.

Accordingly, claims 25 patentably distinguishes over the prior art of record, so that the rejection of claim 25 under 35 U.S.C. §103 should be withdrawn.

Comments on Dependent Claims

Since each of the dependent claims depends from a base claim that is believed to be in condition for allowance, Applicants believe that it is unnecessary at this time to argue the allowability of each of the dependent claims individually. However, Applicants do not necessarily concur with the interpretation of the dependent claims as set forth in the Office Action, nor do the Applicants concur that the basis for the rejection of any of the dependent claims is proper. Therefore, Applicants reserve the right to specifically address the patentability of the dependent claims in the future.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 23/2825 under Docket No. M1103.70167US00 from which the undersigned is authorized to draw.

Dated: 3/8/10

Respectfully submitted,

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